

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 December 2001 (20.12.2001)

PCT

(10) International Publication Number
WO 01/97121 A1

(51) International Patent Classification⁷: G06F 17/60

(21) International Application Number: PCT/KR01/01009

(22) International Filing Date: 12 June 2001 (12.06.2001)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
2000/32246 12 June 2000 (12.06.2000) KR

(71) Applicant and

(72) Inventor: YUN, Seon, Yong [KR/KR]; Sangmyoung-Ju-
taek 101, 112-13 Cheongdam 1-dong, Kangnam-ku, Seoul
135-952 (KR).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

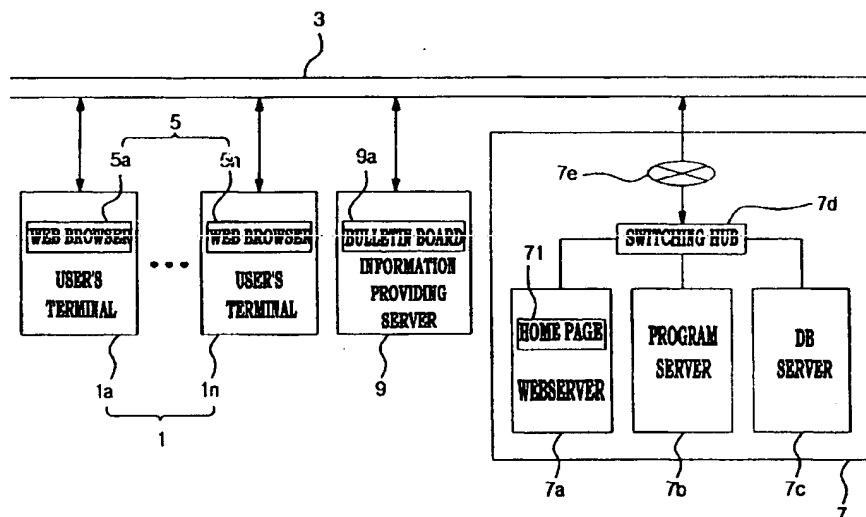
Published:

— with international search report

(74) Agent: LEE, Jae, Hwa; 4th floor, Duck chun B/D, 718-10
Yoksam 1-dong, Kangnam-ku, Seoul 135-081 (KR).

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: ADVERTISING SYSTEM USING SKIN IMAGE APPLIED TO WINDOWS OF CLIENT TERMINAL AND AD-
VERTISING METHOD THEREOF, AND COMPUTER READABLE MEDIA FOR RECORDING ADVERTISING METHOD
PROGRAM



(57) Abstract: An advertising system and method, and a computer readable recording medium are disclosed, in which a general skin image or an advertising image can be applied to a menu portion on a Windows-shell screen in a Windows-series OS. Advertising skin image according to a target marketing can be provided on a network based on a client/server system. The system includes user terminals which can be accessed to the Internet and a system server for allowing user to download a skin image controller when user accesses a home page in the server. The server includes a web server and a program server for providing advertisement skin image information during connection state to the system server and managing an advertisement exposure time for compensation.

ADVERTISING SYSTEM USING SKIN IMAGE APPLIED TO WINDOWS
SCREEN OF CLIENT TERMINAL AND ADVERTISING METHOD THEREOF,
AND COMPUTER READABLE MEDIA FOR RECORDING ADVERTISING METHOD
PROGRAM

5

Technical Field

The present invention relates to an advertising system using a skin image applied to a Windows screen and an advertising method thereof, and more particularly, to a method for applying a skin image to a Windows screen in which a general skin image or an advertising image capable of satisfying an aesthetic desire of a user can be applied to a menu portion on a Windows-shell screen in a Windows-series operating system(OS), and an advertising skin image according to a target marketing can be provided on a network based on a client/server system in the case of an advertising skin image.

Background Art

20 Recently, since the Internet is combined in development of an information telecommunications network and distribution of personal computers, various information providing services and commercial transaction activities which have been processed on an existing off-line system can be processed on an on-line system irrespective of times and places.

Further, only Internet experts could use the Internet

efficiently at the initial time of the Internet. However, since the World Wide Web (WWW) was developed and the web browser programs have been developed to make users conveniently use the WWW, anyone can use the Internet easily and thus Internet users increase explosively in numbers. In particular, the number of persons using the Internet in Korea which showed a slow growth rate until 1998 increased up to ten millions in 2000.

A program which has been being widely distributed and used among web browser programs necessary for accessing the Internet is the Internet Explorer of Microsoft. In this case, the Windows-series OS system, that is, the various windowscreens such as Windows searcher, Mycomputer screen, various folder screens and so on, of the Windows 95, Windows 98, Windows 2000 and Windows NT are based on the Internet Explorer.

Recently, many Internet users install a desired skin image on a menu bar or tool bar in a dedicated browser like Winamp or Jet-audio software, and construct and use their own unique browser circumstances.

At present, such a skin image providing method is largely divided into a plug-in method provided in a website of www.hotbar.com and an independently developed web browser provided in websites of www.solipistic.com, UniWin 2000 or Netsgo.

First, in the case of the Hotbar method providing a skin image by use of a plug-in method, a skin cannot be changed

dynamically. In other words, in the case of Hotbar, a user should change a skin image directly when the user intends to change the skin image. Also, when a user intends to change a skin image in the case of Hotbar, his or her produced skin
5 image file should be registered on the Hotbar site, to then change the skin image, which causes inconveniences to users.

The Hotbar method occupies a space of a predetermined portion on the Internet Explorer, which is a similar portion to a program having another advertising technique as a banner
10 advertising application. Thus, the Hotbar method causes inconveniences to general users.

In addition, a skin is applied if the Hotbar method is performed. However, the skin image occupies a separate screen space. Also, additional links designated in the
15 Hotbar which are not needed for general users are provided as Favorites, which is a method unfit for a concept of optimizing a general users circumstance.

Meanwhile, in the case of the method for applying a skin image in the independently dedicated browser, a separate
20 browser can be downloaded, to then apply a skin. Thus, using a separate browser to apply a skin causes inconveniences to users.

Also, in the case of applying a skin by use of the independently dedicated browser, users are forced to change
25 an existing browser into the independently dedicated browser.

Meanwhile, in view of an advertisement, since an

existing banner advertisement is inserted into a corresponding particular page and shows up on that page, if a user leaves that page, the corresponding page does not show up. Further, an actual click rate of a banner advertisement is nothing but 1-2%, and ordinary users do not recognize the banner advertisement in most cases. Also, banner advertisements are too deficient to satisfy an aesthetic desire of users.

Further, banner advertisements cannot circulate, repeat and change an advertisement. It is not possible to assign various stories with respect to an advertisement, or fabricate a set of series advertisements by images, to thereby induce users to collect banner advertisements to thereby enjoy an effect of advertisements.

The above-described methods providing a skin image have not been tried to transfer an advertising image. Further, it is not possible to provide advertising information dynamically in real-time. Thus, an advertising owner cannot realize a target marketing through an analysis of users.

20

Disclosure of the Invention

To solve the above problems, it is an object of the present invention to provide an advertising system using a skin image dynamically applied on a Windows screen and an advertising method thereof, in which a general skin image or an advertising image capable of satisfying an aesthetic desire of a user can be applied to a menu portion on a Windows

-shell screen in a Windows -series operating system (OS), and an advertising skin image according to a target marketing can be dynamically provided on a network based on a client/server system in the case of an advertising skin image, to thereby enhance an advertisement effectiveness, and a computer readable medium recording an advertising method program.

It is another object of the present invention to provide an advertising system using a skin image applied on a Windows screen and an advertising method thereof, in which a separate space is not occupied, an interface is provided so that individual users conveniently use it, and a collection dedicated skin image is provided, to thereby suffice users' collection desires.

To accomplish the above object of the present invention, there is provided an advertising system using a skin applied on a Windows screen, the advertising system comprising: a number of user terminals each having a web browser therein, which can be accessed to the Internet by using the web browser; and a system server for allowing a user to download a skin image controller when the user accesses a home page in a server through the Internet with the user terminal.

The system server comprises at least one web server for allowing the plurality of user terminals to download the skin image controller and various skin image files upon a user's request when the user accesses the home page in the server through the Internet with the user terminal, a

program server for providing advertisement skin image information based on a user analysis to a Windows screen in a user terminal while maintaining a connection state through the Internet when the user selects an advertisement menu by means of the skin image controller installed in the user terminal and managing a user advertisement exposure time in order to compensate the user for his or her advertisement exposure time, and a database (DB) server for storing and managing various data including membership information, advertisement use information and a number of skin image information.

The advertising system further comprises at least one information provision server for allowing the user terminal to download the skin image controller when the user accesses a bulletin board in various servers through the Internet with his or her own terminal.

Databases (DBs) provided in the database server include a membership information DB containing each membership information, a membership use information DB containing information on how each member uses a home page site in the system server and an advertisement of the skin image controller, a skin DB containing each skin image information, a collection skin DB containing each information of a collection skin issued for collection in a limited number, and a bulletin board & other DB storing other information necessary for operation of various bulletin boards and the home page.

A main menu interface is provided in order to interface the user terminal and the user when the skin image controller is performed. The main menu interface comprises a main menu display positioned in the upper portion, for displaying a plurality of main menus as icons, a skin selector for providing an interface for allowing a user to select one of the plurality of the stored skin files, a skin information display for displaying detailed information of the selected skin file, a sub-menu display for displaying sub-menus of the main menus, and a skin file display for displaying the skin file selected at the time of selecting the skin file in size smaller than an actual size and assisting the user to select the skin file.

The plurality of main menus comprises an advertisement skin menu for receiving an advertisement skin from the system server on a real-time basis and displaying the received advertisement skin on the Windows screen in the terminal as a skin, a general picture menu for selecting general picture skins drawn by the system server and the user, a collection album menu connected to the system server, for managing the user's own collection skin, a conversion menu for converting the user's drawn picture file into a skin file, a skin album arrangement menu for managing the user's skin stored in the terminal, and an end menu for performing a procedure necessary for terminating the skin image controller.

According to another aspect of the present invention,

there is also provided an advertising method using a dynamic Windows skin, the advertising method comprising the steps of: accessing one of a home page in a system server and a bulletin board in an information provision server, which
5 are connected through the Internet from a user's terminal by a user, and downloading a skin image controller program from the selected home page or bulletin board so that the downloaded skin image controller program is registered and installed in a start program; displaying a main menu interface
10 on a display screen of the terminal in which the main menu interface includes a main menu display having a plurality of main menus including an advertising skin menu in response to the skin image controller program executed by the user; allowing the skin image controller to access a program server
15 in the system server through the Internet automatically when the user has selected the advertisement skin menu in the main menu interface; performing a membership registration procedure and a login authentication procedure according to an access to the server and a preference analysis according
20 to registration information of members, comparing an advertisement file list in the server with advertisement file list information in the user terminal, and judging whether the user terminal has files to be advertised; transmitting skin picture files to be advertised from the
25 program server to the user terminal in the case that there is no skin picture files to be advertised in the user terminal; applying an advertisement skin by distributing the

advertisement skin picture file received from the program server to the Windows screen in the user terminal by the skin image controller in the user terminal; and replacing the currently displayed advertisement skin by another advertisement skin periodically.

Also, the terminal according to the present invention comprises the steps of: accessing the system server, for receiving a plurality of advertisement skin files all at a time; designating a sequence at random with respect to which one of the received plurality of advertisement skin files will be advertised; and replacing the advertisement skin periodically in every set time according to the set sequence and distributing the replaced advertisement skin on the Windows screen.

According to still another aspect of the present invention, there is also provided a computer readable recording medium containing a program for performing an advertisement using a dynamic Windows skin in a user's terminal, the program comprising the steps of: displaying a main menu interface including a main menu display having a plurality of main menus including an advertisement skin menu, in response to a user's execution of skin image controller program in the case that the skin image controller program has been registered/installed in the user's terminal; allowing the skin image controller to access a program server in the system server through the Internet automatically when the user has selected the advertisement

skin menu in the main menu interface; performing a membership registration procedure and a login authentication procedure according to an access to the server and a preference analysis according to registration information of members, comparing
5 an advertisement file list in the server with advertisement file list information in the user terminal, and judging whether the user terminal has files to be advertised; transmitting skin picture files to be advertised from the program server to the user terminal in the case that there
10 is no skin picture files to be advertised in the user terminal; applying an advertisement skin by distributing the advertisement skin picture file received from the program server to the Windows screen in the user terminal by the skin image controller in the user terminal; and replacing
15 the currently displayed advertisement skin by another advertisement skin periodically.

As described above, the present invention suffices a convenience and an aesthetic desire and as well as a collection desire of users, and also provides a fun. Also,
20 advertisers can escape from an existing banner advertisement or a discontinuous advertisement and thus maximize an advertising effect while sufficing an aesthetic desire of users positively. In addition, an operator who operates the system according to the present invention can achieve
25 a total profit besides securing members and advertising fees.

Brief Description of the Drawings

The above objects and other advantages of the present invention will become more apparent by describing the preferred embodiments thereof in more detail with reference
5 to the accompanying drawings in which:

FIG. 1 is a schematic block diagram of an advertising system using a skin applied on the Windows screen in a user terminal according to the present invention;

FIG. 2 is a view showing a DB structure of a DB server
10 of FIG. 1;

FIGS. 3A through 3D are flowchart views for explaining a method of applying a skin image on the Windows screen in a user terminal and an advertising method using the skin image application method according to the present invention;

15 FIG. 4 shows a shape of a skin image controller registered as a tray icon;

FIG. 5 shows a structure of a main menu interface with respect to the skin image controller;

FIG. 6 shows a main menu of the skin image controller;

20 FIG. 7 shows an example of a screen showing a classification structure of a skin image and skin file information of the selected skin folder when a general picture menu and a skin album arrangement menu are selected in the main menu interface;

25 FIG. 8 shows an example of a screen showing detailed information of a corresponding file when a particular skin file is clicked in FIG. 7;

FIG. 9 shows an example of a screen showing a sub-menu with respect to a main menu;

FIG. 10 shows a GUI provided to a user when a picture file is intended to be converted into a skin file;

5 FIG. 11A shows an example of a screen using the Internet Explorer before the skin image has been applied;

FIGS. 11B through 11D show an example of a screen where a skin image has been applied according to the present invention, respectively;

10 FIG. 12A shows an example of a screen where a general skin image has been applied;

FIG. 12B shows an example of a screen where an advertisement skin image has been applied; and

15 FIG. 13 shows an example of a screen where a logo of an advertising sponsor has been inserted into a web browser during access/connection of the Internet.

Best Mode for Carrying out the Invention

20 A preferred embodiment of the present invention will be described below in more detail with reference to the accompanying drawings.

A network of an advertising system using a skin applied on a Windows screen in a user's terminal according to the present invention includes a number of user terminals (PC)
25 1a-1n each having a web browser 5a-5n such as the Internet Explorer therein, which can be accessed to the Internet 3 by using the web browser 5, and a system server 7 and an

information providing server 9 for allowing a user to download a skin image controller to be described later, when the user accesses a home page 71 in the system server 7 or a bulletin board 9a in various information providing server 9 through the Internet 3 with the user terminal 1.

The connection between the user terminal 1 and the system server 7 or the information providing server 9 is accomplished by a wired method using an Internet connection via a modem and a PSTN, or a dedicated line or an ISDN, or a wireless Internet connection method via a cellular, a PCS, microwave or a satellite telecommunications network. Each user's terminal 1 can be accessed to the Internet by adopting one of the above-described Internet connection methods.

Preferably, the terminal 1 is a Windows -based personal computer (PC) or a terminal which includes a microprocessor not lower than a Pentium series, a hard disc drive, and a communication modem, in which a web browser 5 such as the Internet Explorer supporting the Internet access is mounted.

Further, each terminal 1 is a workstation, a general portable phone terminal such as PCS and PHS, a portable digital assistant (PDA), a settop box, a digital television, or a web phone in addition to a PC if the terminal 1 is an Internet accessible terminal.

Also, the system server 7 includes a number of web server 7a for allowing the plurality of user terminals to download the skin image controller 20 and various skin image files

from a database server 7c upon a user's request when the plurality of user terminals 1 access a home page 71 in a system server 7 by using a web browser 5, a program server 7b for providing advertisement skin image information based on a user analysis to a Windows screen to a user terminal while maintaining a connection state through the Internet 3 when the user selects an advertisement menu by means of the skin image controller 20 installed in the user terminal and managing a user advertisement exposure time, a database (DB) server 7c for storing and managing various data including membership information, advertisement use information and skin image information, and a router 7e and a switching hub 7d for distributing a packet received via the Internet 3 through LAN cards installed in the plurality of web servers 7a, the program server 7b and the database (DB) server 7c.

In the internal connection method adopted in the system server 7, the number of web servers 14 is determined according to how many user terminals 1a-1n are connected to the system server 7. The network in the system server 1 may be configured into a well-known system according to how the number of web servers and the security system called a firewall are configured.

The DB server 7c can be configured using a well-known relational database management system (RDBMS) such as Oracle, SQL (Structured Query Language) server, and Informix.

As shown in FIG. 2, databases (DBs) provided in the database server 7c include a membership information DB 11

containing each membership information such as a member identification, password, name, gender, residence number, e-mail, telephone number, address, and job, a membership use information DB 12 containing information on how each member uses a home page site 71 in the system server 7 and an advertisement of the skin image controller 20 such as a cyber money of each member, collection skin information, and member marketing information such as town, age, gender and job, a skin DB 13 containing each skin image information such as a skin name and explanation, information concerning to what category each skin image does belong, a skin registration, a skin registration date, and the number of downloading a skin, a collection skin DB 14 containing each information of a collection skin such as kind information of a collection skin, an owner of each collection skin, and the number of the left collection skin, which are separated from general skin information and managed in order to manage the number of the collection skins, and a bulletin board & other DB 15 storing other information necessary for operation of various bulletin boards such as a free bulletin board, a question and answer (Q & A) bulletin board, and an official announcement board, and the home page.

In the case that an advertisement view menu is selected in the skin image controller 20, the member use information DB 12 and the member information DB 11 should be simultaneously accessed. In this case, the two DBs 11 and 12 are overlapped in view of the town, age, gender and job

portions. However, portions which are frequently used in the program and site are inserted in the member use information, which heightens an efficiency in operations of the skin image controller 20 and the home page site.

5 An installation method of installing the skin image controller 20 according to the present invention and a use method thereof will be described in detail with reference to FIGs. 3A through 3D.

10 First, a user drives a web browser 5 in a user terminal 1, and accesses a home page 71 provided in a web server 7a of a system server 7 accessed to the Internet 3, or a bulletin board 9a in an information providing server 9 such as HITEL or CHOLLIAN which is one of the Korean information providing websites, and downloads a program of the skin image controller 15 20, and installs the downloaded skin image controller program in the terminal 1 (S1 and S2).

20 Then, if a user installs the program of the skin image controller 20 in the terminal, the skin image controller program is automatically registered into a start program in the terminal. Thus, after installation, even if the icon of the skin image controller 20 is not clicked, the skin image controller program is automatically executed when an OS is booted in the terminal.

25 However, when a user wishes to execute the skin image controller 20 manually, he or she double-clicks the icon of the skin image controller 20 in order to execute the skin image controller 20 (S3). Here, in the case that the icon

of the skin image controller 20 is double-clicked during execution of the skin image controller 20 in the user terminal 1, the skin image controller 20 automatically judges and prevents the double execution command.

5 Then, if the skin image controller 20 is executed, an initial screen interface, that is, a main menu interface 20a is displayed on a monitor or a display screen in the terminal, as shown in FIG. 5 (S4).

 The main menu interface 20a includes a main menu display
10 21 positioned in the upper portion, for displaying a plurality of main menus 26-31 as icons, a skin selector 22 for providing an interface for allowing a user to select one of the plurality of the stored skin files, a skin information display 23 for displaying detailed information of the selected skin file,
15 a sub-menu display 24 for displaying sub-menus of the main menus, and a skin file display 25 for displaying the skin file selected at the time of selecting the skin file in size smaller than an actual size and assisting the user to select the skin file.

20 The present invention has six main menus. A user can manipulate various operations through the main menus. For example, the user can shift a current mode into a general skin mode or an advertisement skin mode, and perform an operation of arranging a skin album.

25 The main menus 26-31 are indicated as an icon as in the main menu display 21 of FIG. 6, respectively. If a user clicks a corresponding menu, the clicked menu is executed.

Each menu includes a general picture menu 26, an advertisement picture menu 27, a collection album menu 28, a conversion menu 29, a skin album arrangement menu 30, an end menu 31, and so on.

5 As shown in FIG. 7, the skin selector 22 basically includes a skin folder structure portion 22a showing each skin file with a tree structure in which skins are structured and stored as in a Windows searcher at the time of selecting a skin album arrangement menu 30 or a general picture menu
10 26, and a skin list portion 22b showing a list of a corresponding skin file with respect to the selected folder, to thereby arrange the skin files or give conveniences at the time of selecting the skin file.

FIG. 7 shows a list of skin files belonging to My skin
15 folder 22c in the skin list portion 22b in the case that the Myskin folder 22c is selected in the skin folder structure portion 22a.

Also, as shown in FIG. 8, the skin information display 23 displays detailed explanation such as a file name 23a,
20 a byte number 23b, a finally correction date 23c with respect to a corresponding file 23d when a single skin file 22d is clicked in the skin list portion 22b with a mouse.

For example, FIG. 7 shows an example of a screen when a user clicks a skin file 22d indicated as 'My face enlargement
25 skin' among the skin file 22d with a mouse.

A sub-menu display 24 makes and displays a corresponding sub-menu as icons as in the main menu when other sub-menu

exists in a corresponding main menu at the time of clicking one of the main menu. In this case, a user clicks a sub-menu like the main menus 26-31, in order to operate a corresponding function.

5 Only the skin album arrangement menu 30 exists as a main menu in which a sub-menu exists.

 Meanwhile, a user can add or delete a folder, and move or delete a skin file to another folder. The portion of performing the above-described function is a 'skin album
10 arrangement menu 30' in the main menu.

 In the case that a user clicks the skin album arrangement menu 30 in the main menu with a mouse, a sub-menu of the skin album arrangement menu 30 is displayed as shown in FIG. 9.

 The sub-menu includes a folder addition menu 30a for
15 adding a new folder, a folder deletion menu 30b, a skin file movement menu 30c which is used for moving the selected skin file 22d to another folder, a skin file deletion menu 30d, a skin file finding menu 30e and a skin album end menu 30f.

 In the present invention, the skin image controller
20 20 can be operated by clicking a corresponding icon in the main menu interface 20a with a mouse. However, the skin image controller 20 can be operated through a pop-on menu generated by depressing the right button in the mouse.

 For example, when a user selects one folder in the skin
25 folder structure portion 22a and depresses the right button of the mouse, menus 30a and 30b such as a 'folder addition' or 'folder deletion' turn up. When a user selects one of

the skin files 22d in the skin list portion 22b and depresses the right button, menus 30d such as a 'skin file deletion' and a registration as a skin' turn up. Also, a corresponding skin file 22d can be moved to another folder by a drag & drop function with the mouse.

The skin file display 25 displays a corresponding skin file picture in smaller size than an actual size when a user clicks one of the skin files 22d in the skin list portion 22b.

In the case that the stored skin files are increased, a user cannot frequently know which picture belongs to which skin file with only a skin file name or explanation. Thus, the skin selector 22 indicates the name and explanation of the skin file, and the skin file display 25 displays the skin file picture when a user has selected one skin file.

If a user selects one picture from the skin selector 22 and the skin file display 25, and intends to register the selected picture as his or her own Explore skin, a corresponding file id double-clicked from the skin list portion 22b in the skin selector 22 or depresses the mouse right button and then clicks a 'registration as a skin' button among the menus of the right button.

If a user depresses a minimization button on an interface screen in the initial screen interface 20a, the skin image controller 20 is basically registered as a tray icon on the lowermost portion of the monitor as shown in FIG. 4 (S5).

Thereafter, if the tray icon of the registered skin image controller 20 is double-clicked, a main menu such as an 'initial screen interface 20a' is again displayed on the monitor screen.

5 If a user does not select any skin picture in the initial screen interface 20a, the skin image controller 20 basically and automatically applies the general skin file having selected before as a skin (S6). The previously selected general skin file is called a default skin. Although the
10 skin image controller 20 is re-executed by turning off the terminal 1 and then booting the terminal 1, a default skin stored in the program is automatically displayed.

However, if a skin picture having selected before is an advertisement, the skin image controller 20 does not
15 display the advertisement automatically but displays a 'general skin file' having selected before the advertisement. That is, the advertisement skin file cannot be a default file.

If a user has undergone a 'designated default skin
20 output' procedure, the skin image controller 20 awaits a user's event (S7). Here, the event means a case that a user double-clicks a tray icon in the skin image controller 20, which is called a main menu select event. If a main menu select event occurs, a main menu interface 20a which had
25 been seen at the 'initial screen interface' procedure appears on the monitor.

The above-described main menu is divided into the

following six kinds.

1. End menu

When a user clicks an end menu 31 in the main menu (S9), this means that the user wishes to terminate the skin image
5 controller 20.

In the case that a user clicks an end button, it is judged what is a current advertisement selection state (S10), to thereby judge whether an advertisement is viewed according to a very previous selection or a general skin is selected.

10 If an advertisement has been very previously selected, various altered details such as a cyber money corresponding to a time for which a user has viewed the advertisements are stored in a member use information DB 12 in the system server 7 (S11).

15 Then, a message concerning the altered use details of the user such as a sentence that "Since an advertisement has been viewed for ○○ minutes, a cyber money of ×× dollars is deposited" is output (S12).

Then, after the tray icon is eradicated and a
20 termination procedure of various system side is undergone, the program of the skin image controller 20 is terminated (S13).

2. General picture menu

A situation when a user clicks a 'general picture menu
25 26' button (S14) is divided into two kinds that an advertisement is viewed according to a very previous selection or a general skin is selected.

If the general skin has been selected just before, a general skin picture registered in the Explorer of the user by the skin image controller 20 is not what he or she wants. In this case, the user intends to change it into another
5 one. If an advertisement skin 40 has been very previously selected as shown in FIG. 12B, the user may feel like stopping an exposure to the advertisement.

If a user selects the general picture menu 26, it is judged what is a current advertisement selection state (S15),
10 to thereby judge whether an advertisement skin 40 is viewed according to a very previous selection or a general skin 45 is selected.

If an advertisement skin 40 has been very previously selected, various altered details such as a cyber money
15 corresponding to a time for which a user has viewed the advertisements are stored in a member use information DB 12 in the system server 7 (S16).

Then, a message concerning the altered use details of the user such as a sentence that "Since an advertisement
20 has been viewed for ○○ minutes, a cyber money of ×× dollars is deposited" is output (S17).

Sequentially, after the skin image controller 20 obtains the structural information of the skin folder list of the user stored by itself (S18), the skin list is displayed
25 at a corresponding position of the skin selector 22 in the main menu interface 20a based on the obtained skin folder tree structure information (S19).

Thereafter, the user selects one skin file in the skin selector 22 and double-clicks it or depresses the mouse right button and selects a 'registration as a skin' button in a pop-on menu (S20).

- 5 Accordingly, a default skin value is changed into a general skin file name selected by the user (S21). The file picture of the general skin 45 selected by the user is replaced by an Explorer skin of the user as shown in FIG. 12A (S22).

10 Then, the user awaits whether or not an event for selecting one among the main menus occurs (S30).

3. Collection album menu

A user's click of the collection album menu 28 in step S23 means that he or she feels like viewing a list of the collection skins collected by himself or herself.

- 15 Information concerning the collection album collected by the corresponding user resides in the home page 71 of the system server 7. Thus, the Explorer is automatically displayed into the home page of the corresponding system server concerning the collection skin and moved (S24 and
20 S25).

A user can view the list of the collection skins collected by himself or herself from the collection album on the home page 71. Then, the system awaits until the user performs the other main menu selection operation (S30).

- 25 Thus, the user can check how many collection skins have been collected using the collection album menu 28. A collection skin is divided into a series volume and a separate

volume. The home page in the system server gives a premium or product to users who collect particular series of the collection skin to thereby compensate for collection of the collection skins.

5 A general user can be satisfied with collection of skin picture files like a post-stamp collection, in addition to an aesthetic desire satisfaction which displays a skin on his or her own Explorer. If a fun element is added in a skin file and fabricated as a series skin, some users may
10 endeavor to collect all of a corresponding series skin.

 An event may be held in the home page of the server, in which a premium or a prize money is given to users who collect all of the designated collection skins. Separately, for example, skins of the subject of the pocket monster skin
15 picture may be collected with an individual taste.

 Also, the collection skin picture file is basically copied by the other persons. Thus, if a general user copies his or her own collection skin files carelessly for the other persons, it is difficult to discriminate who owns an original
20 corresponding skin picture file. Accordingly, the structure solving the above-described problem is required.

 For this purpose, the database in the system server possesses a serial number of a corresponding collection skin picture file and an owner's ID. Thus, although an individual
25 user copies his or her own collection skin picture files for the others at random, only one person is an owner who possesses a corresponding collection skin picture file on

the database information in the system server.

Meanwhile, a collection skin can provide the following puzzle-like advertising technique.

(a) Individual advertisement skin pictures of a limited
5 number are provided in a premium way to a user who views
an advertisement skin in a skin collection menu.

(b) If the advertisement skin pictures are collected
by a predetermined number, for example, ten to twelve, an
advertisement picture can be completed.

10 (c) If a user completes an advertisement picture, a
gift is given to the user.

For example, a collection skin picture may be designed
so that ten skins are collected to complete the whole picture.
Through a puzzle-like collection skin, an advertising effect
15 can be maximized for an advertiser, and a fun of collecting
corresponding skins can be induced for an individual user.

4. Menu for converting a picture file into a skin file

If a user clicks a conversion of a picture file into
a skin file (S26), it means that he or she may want to convert
20 his or her own picture files such as JPG, GIF, BMP and so
on made up in a "Photoshop" or another picture drawing tool,
into a skin file according to the present invention.

If a menu 29 for converting a picture file into a skin
file is clicked, the skin selection portion 22 is changed
25 as shown in FIG. 10.

In FIG. 10, a left-hand portion 33a represents
information of a skin folder structure, and a right-hand

portion 33b displays a screen which is same as that displayed when a "My computer" in Windows is clicked.

Here, if a user selects his or her drawn picture file in the right-hand portion (S27), and then clicks an arrow
5 going to the left 33, a corresponding picture file is automatically converted into an MSK file pattern which is a skin dedicated file and moves to a folder selected in the left-hand portion (S28).

5. Skin album arrangement menu

10 Since a skin album arrangement menu 30 has been described before according to the procedures S46 and S47 shown in FIG. 3D with reference to FIGs. 6 through 9, the detailed description thereof will be omitted.

6. Advertisement picture menu

15 When a user selects an advertisement picture menu 27 in a main menu interface 20a, a skin image controller 20 automatically accesses a program server 7b in a system server 7 through the Internet 3 (S32).

In the case that the skin image controller 20 has
20 accessed the program server 7b, it is judged whether or not the user is a registered member. In the case of a unregistered person, the user presses a new member participation button and requests for a member registration in order to perform a member registration procedure. Meanwhile, in the case
25 of a registered member, a login authentication procedure and a preference analysis are performed (S33-S35).

That is, if a user inputs an identification (ID) and

a password (PW), the data information is transferred to the program server 7b, and the server 7b analyzes a preference of the corresponding member such as residence/gender/age/job from a member DB 11.

5 Then, the advertisement file list in the server is compared with that of the user, in order to judge whether files to be advertised exist in the user's terminal 1 (S36). In the case that a file to be advertised exists in the user's terminal 1, an advertisement skin picture cannot be
10 retransmitted from the server.

Thereafter, it is judged whether or not a skin picture file to be advertised exists in the user's terminal 1.

In the case that there is no skin picture file to be advertised in the user's terminal, the program server 7b
15 transmits the skin picture files to be advertised to the user's terminal. Assuming that ten advertisement skins are to be advertised today, ten advertisement files are transmitted from the server all at a time (S38).

However, in the present invention, it is possible to
20 download advertisement skins of a certain date all at a time, or sequentially download an advertisement skin at every period from the server 7b, to thereby update the advertisement skin under display.

The skin image controller 20 existing in the user's
25 terminal 1 designates an advertisement priority at random to determine what advertisement skin picture file will be advertised among the advertisement skin picture files

transmitted from the program server 7b all at a time (S39).

Then, if a priority has been determined with respect to the advertisement skins, a timer is turned on to measure a time (S40), and simultaneously an advertisement skin
5 corresponding to a current sequence is loaded as the skin of the Explorer screen in the user's terminal (S41).

Accordingly, the Explorer skin is changed into the advertisement skin 35 from FIG. 11A to FIG. 11B. Also, in addition to the change of the Explorer skin, the "My
10 computer" in the Windows screen is changed into the same skin as shown in FIG. 11C.

Thereafter, the skin image controller 20 installed in the user's terminal awaits an event (S42), in which case the event is largely divided into two kinds of events: one
15 is to load the next advertisement when the timer is time-out; and the other is to load the main menu by double-clicking a tray icon at a user end.

If a timer time-out event occurs, a priority of an advertisement skin to be advertised is passed over to the
20 next priority (S43 and S44). In the case that the main menu has been selected, the operation proceeds to the step S8 (S45).

As described above, the present invention applies a designated picture adapted for an individual taste basically.
25 In the case of an advertisement skin picture, a picture or image is dynamically applied as a skin in the Windows basic shell screen as well as the Explorer screen, on a network

based on a client/server system.

In the case that a user selects an advertisement in a main menu, an advertisement designated by the server is applied. The advertisement skin application is performed
5 while the skin image controller 20 communicates with the server 7b. Once one advertisement is displayed for a predetermined time and then finished, the displayed advertisement is automatically changed into the next advertisement.

10 In this case, the user is compensated for with a certain amount of a cyber money in proportion to a time for which the advertisement has been applied as a skin. Also, a target marketing adapted from a user's taste can be performed in addition to a general advertisement, at a company operating
15 the system server 7. That is, an advertisement skin picture issued from a server is not same for all users, and thus a different advertisement skin can be transmitted according to various factors such as ages, jobs and residence places of users.

20

Industrial Applicability

As described above, a skin applied according to the present invention has the following features.

1. An aesthetic desire of an individual user can be
25 satisfied. An existing Explorer menu of a gray color can be escaped, to thereby decorate the Explorer as desired with a user's desired picture or an advertisement skin

picture.

2. While satisfying an aesthetic desire of an individual user, an advertisement skin picture can maximize an advertisement effect. Although an existing banner advertisement and various Internet advertisement technique using the existing banner advertisement do not satisfy a user's aesthetic desire but emphasize only a simple cyber money, the advertisement skin picture satisfies a user's aesthetic desire and performs an advertisement.

3. The present invention does not consume a separate space for advertising. Advertisement techniques such as an existing banner advertisement or various toolbar type using the same cannot but consume a predetermined space on a user's computer screen. However, a skin provided by a skin image controller does not use a separate space for advertising but uses a menu space originally occupied by the Explorer, to thereby perform an advertisement and thus minimize inconveniences of an individual user.

4. An advertiser can perform a target marketing as described above to thereby enhance an advertising efficiency.

5. An individual user can receive an easy-to-use interface. A skin image controller according to the present invention is an Explorer skin dedicated program and thus provides an interface convenient for managing and using skin picture files collected by the individual user.

6. A collection skin, that is, a collection dedicated

skinpicture file is provided, to satisfy an individual user, which is a unique portion of the present invention only. Thus, skins are not only collected but also can be collected through a limited number of collection skins to be sold,
5 as in a post stamp collection.

7. The logo of the Internet Explorer showing as an animation during connection or access of the Internet is changed into a logo 50 of an advertiser as shown in FIG. 13, to thereby maximize an advertising effect further. In
10 FIG. 13, the logo positioned on the upper-right portion is changed into, for example, a "Hyundai Motor" logo.

As described above, the present invention suffices a convenience and an aesthetic desire and as well as a collection desire of users, and also provides a fun. Also,
15 advertisers can escape from an existing banner advertisement or a discontinuous advertisement and thus maximize an advertising effect while sufficing an aesthetic desire of users positively. In addition, an operator who operates the system according to the present invention can achieve
20 a total profit besides securing members and advertising fees.

As described above, the present invention have been described with respect to the particularly preferred embodiments, but the present invention is not limited in the above-described embodiments. It is apparent to one who is
25 skilled in the art that there are many variations and modifications within the scope of the appended claims with departing off from the spirit of the present invention.

Claims

1. An advertising system using a skin applied on a Windows screen of a user's terminal, the advertising system
5 comprising:

a number of user terminals each having a web browser therein, which can be accessed to the Internet by using the web browser; and

a system server for allowing a user to download a skin
10 image controller when the user accesses a home page in said system server through the Internet with the user terminal, wherein said system server comprises:

at least one web server for allowing the plurality of user terminals to download the skin image controller and
15 various skin image files upon a user's request when the user accesses the home page in the system server through the Internet with the user terminal;

a program server for providing advertisement skin image information based on a user analysis to a Windows screen
20 in the user terminal while maintaining a connection state through the Internet when the user selects an advertisement menu by means of the skin image controller installed in the user terminal and managing a user advertisement exposure time in order to compensate the user for his or her
25 advertisement exposure time; and

a database (DB) server for storing and managing various data including membership information, advertisement use

information and a number of skin image information.

2. The advertising system of claim 1, further comprising at least one information provision server for
5 allowing the user terminal to download the skin image controller when the user accesses a bulletin board in various servers through the Internet with his or her own terminal.

3. The advertising system of claim 1, wherein
10 databases (DBs) provided in the database server comprise:
a membership information DB containing each membership information;

a membership use information DB containing information on how each member uses a home page site in the system server
15 and an advertisement of the skin image controller;

a skin DB containing each skin image information;

a collection skin DB containing each information of a collection skin issued for collection in a limited number;
and

20 a bulletin board & other DB storing other information necessary for operation of various bulletin boards and the home page.

4. The advertising system of claim 3, wherein said
25 membership use information DB comprises a cyber money of each member, a collection skin information, and information about a residence place, age, gender and job of each member,

5. The advertising system of claim 1, wherein a main menu interface is provided in order to interface the user terminal and the user when the skin image controller is performed, wherein said main menu interface comprises:

5 a main menu display positioned in the upper portion, for displaying a plurality of main menus as icons;

 a skin selector for providing an interface for allowing a user to select one of the plurality of the stored skin files;

10 a skin information display for displaying detailed information of the selected skin file;

 a sub-menu display for displaying sub-menus of the main menus; and

 a skin file display for displaying the skin file
15 selected at the time of selecting the skin file in size smaller than an actual size and assisting the user to select the skin file.

6. The advertising system of claim 5, wherein said
20 plurality of main menus comprises:

 an advertisement skin menu for receiving an advertisement skin from the system server on a real-time basis and displaying the received advertisement skin on the Windows screen in the terminal as a skin;

25 a general picture menu for selecting general picture skins drawn by the system server and the user;

 a collection album menu connected to the system server,

for managing the user's own collection skin;

a conversion menu for converting the user's drawn picture file into a skin file;

a skin album arrangement menu for managing the user's
5 skin stored in the terminal; and

an end menu for performing a procedure necessary for terminating the skin image controller.

7. An advertising method using a dynamic Windows
10 skin, the advertising method comprising the steps of:

accessing one of a home page in a system server and a bulletin board in an information provision server, which are connected through the Internet from a user's terminal by a user, and downloading a skin image controller program
15 from the selected home page or bulletin board so that the downloaded skin image controller program is registered and installed in a start program;

displaying a main menu interface on a display screen of the terminal in which the main menu interface includes
20 a main menu display having a plurality of main menus including an advertising skin menu in response to the skin image controller program executed by the user; allowing the skin image controller to access a program server in the system server through the Internet automatically when the user has
25 selected the advertisement skin menu in the main menu interface;

performing a membership registration procedure and a

login authentication procedure according to an access to the server and a preference analysis according to registration information of members, comparing an advertisement file list in the server with advertisement file list information in the user terminal, and judging whether the user terminal has files to be advertised;

transmitting skin picture files to be advertised from the program server to the user terminal in the case that there is no skin picture files to be advertised in the user terminal;

applying an advertisement skin by distributing the advertisement skin picture file received from the program server to the Windows screen in the user terminal by the skin image controller in the user terminal; and replacing the currently displayed advertisement skin by another advertisement skin periodically.

8. The advertising method of claim 7, wherein said terminal comprises a program comprising the steps of:

accessing the system server, for receiving a plurality of advertisement skin files all at a time;

designating a sequence at random with respect to which one of the received plurality of advertisement skin files will be advertised; and

replacing the advertisement skin periodically in every set time according to the set sequence and distributing the replaced advertisement skin on the Windows screen.

9. The advertising method of claim 7, further comprising the steps of:

judging whether a current advertisement is selected in response to an operation that a user clicks an end menu
5 in a main menu;

storing compensation details corresponding to a time for which a user has viewed an advertisement in a membership use information database in the case that an advertisement has been selected just before in the result of judgment,
10 and outputting a message concerning the user's altered use details to the user; and

removing a tray icon created according to installation of the skin image controller and terminating the skin image controller program after having undergone the termination
15 procedure of the system.

10. The advertising method of claim 7, wherein said main menu further comprises:

a general picture menu for selecting a general picture
20 skin stored in the system server and drawn by the user;

a collection album menu connected to the system server, for managing the user's collection skin;

a conversion menu for converting the user's drawn picture file into a skin file; and

25 a skin album arrangement menu for managing the user's skin stored in the terminal,

wherein the advertisement skin display procedure is

terminated in response to selection of one of the main menu and the user's interface of the selected menu is provided to the main menu interface.

5 11. The advertising method of claim 10, further comprising the steps of:

 providing an advertisement skin picture of a limited number to a user who has viewed an advertisement skin as a premium way when the user's terminal is accessed to the
10 system server, in response to selection of the collection album menu; and

 performing a predetermined compensation in response to collection of a predetermined number of the advertisement skin pictures and completion of a single advertisement
15 picture.

 12. The advertising method of claim 10, further comprising the steps of:

 displaying a list of skin folders and a list of skin
20 files corresponding to the selected skin folder in the main menu interface, in response to selection of the general picture menu; and

 replacing the skin with respect to the Windows screen by an image of the selected skin file in response to selection
25 of the skin file.

13. The advertising method of claim 10, further comprising the steps of:

selecting the user's drawn picture file from the skin selection portion in the main menu interface after selecting
5 the conversion menu and executing the conversion of the selected picture file into the skin dedicated file; and
moving the converted skin file to the selected skin folder and storing the same in response to the conversion.

10 14. A computer readable recording medium containing a program for performing an advertisement using a dynamic Windows skin in a user's terminal, the program comprising the steps of:

displaying a main menu interface including a main menu
15 display having a plurality of main menus including an advertisement skin menu, in response to a user's execution of skin image controller program in the case that the skin image controller program has been registered/installed in the user's terminal;

20 allowing the skin image controller to access a program server in the system server through the Internet automatically when the user has selected the advertisement skin menu in the main menu interface;

performing a membership registration procedure and a
25 login authentication procedure according to an access to the server and a preference analysis according to registration information of members, comparing an advertisement file list

41

in the server with advertisement file list information in the user terminal, and judging whether the user terminal has files to be advertised;

transmitting skin picture files to be advertised from
5 the program server to the user terminal in the case that there is no skin picture files to be advertised in the user terminal;

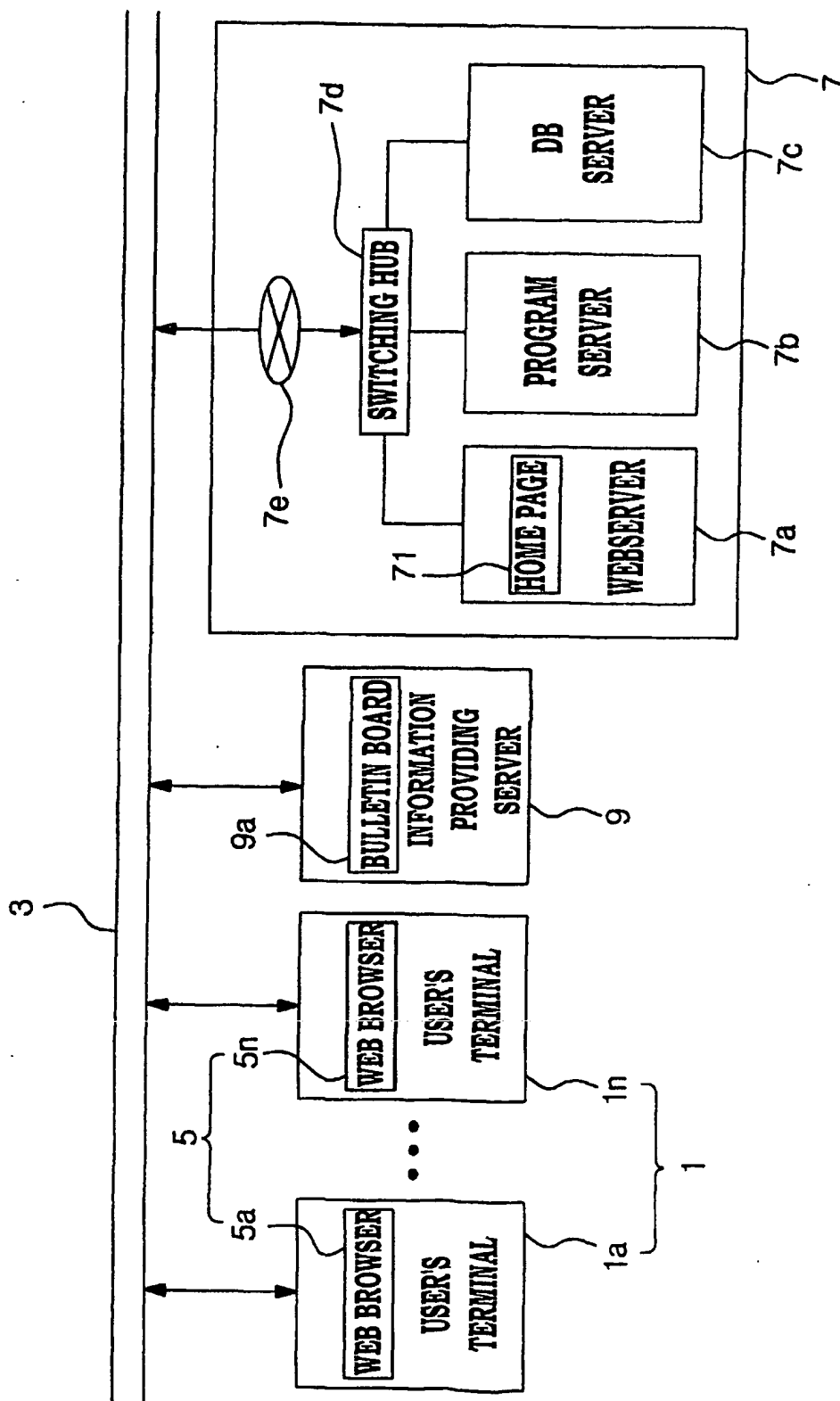
applying an advertisement skin by distributing the advertisement skin picture file received from the program
10 server to the Windows screen in the user terminal by the skin image controller in the user terminal; and

replacing the currently displayed advertisement skin by another advertisement skin periodically.

15

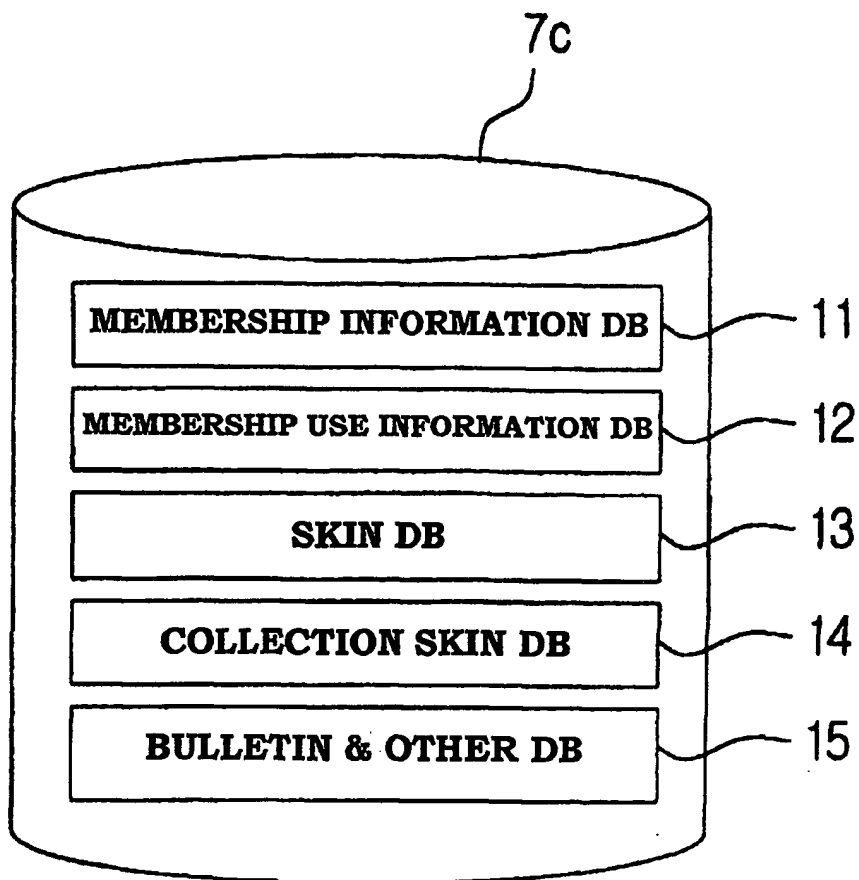
1/13

FIG. 1

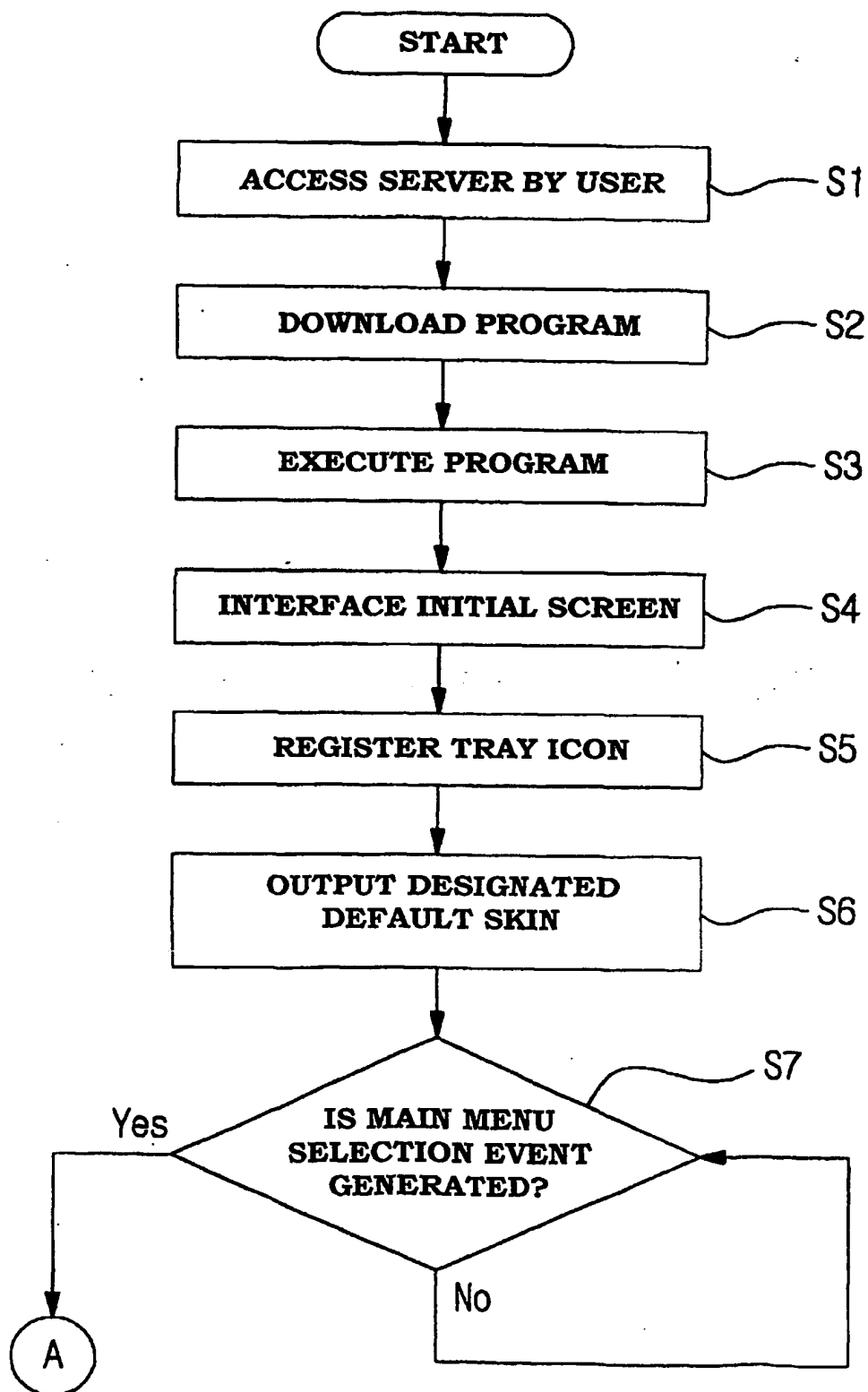


2/13

FIG. 2

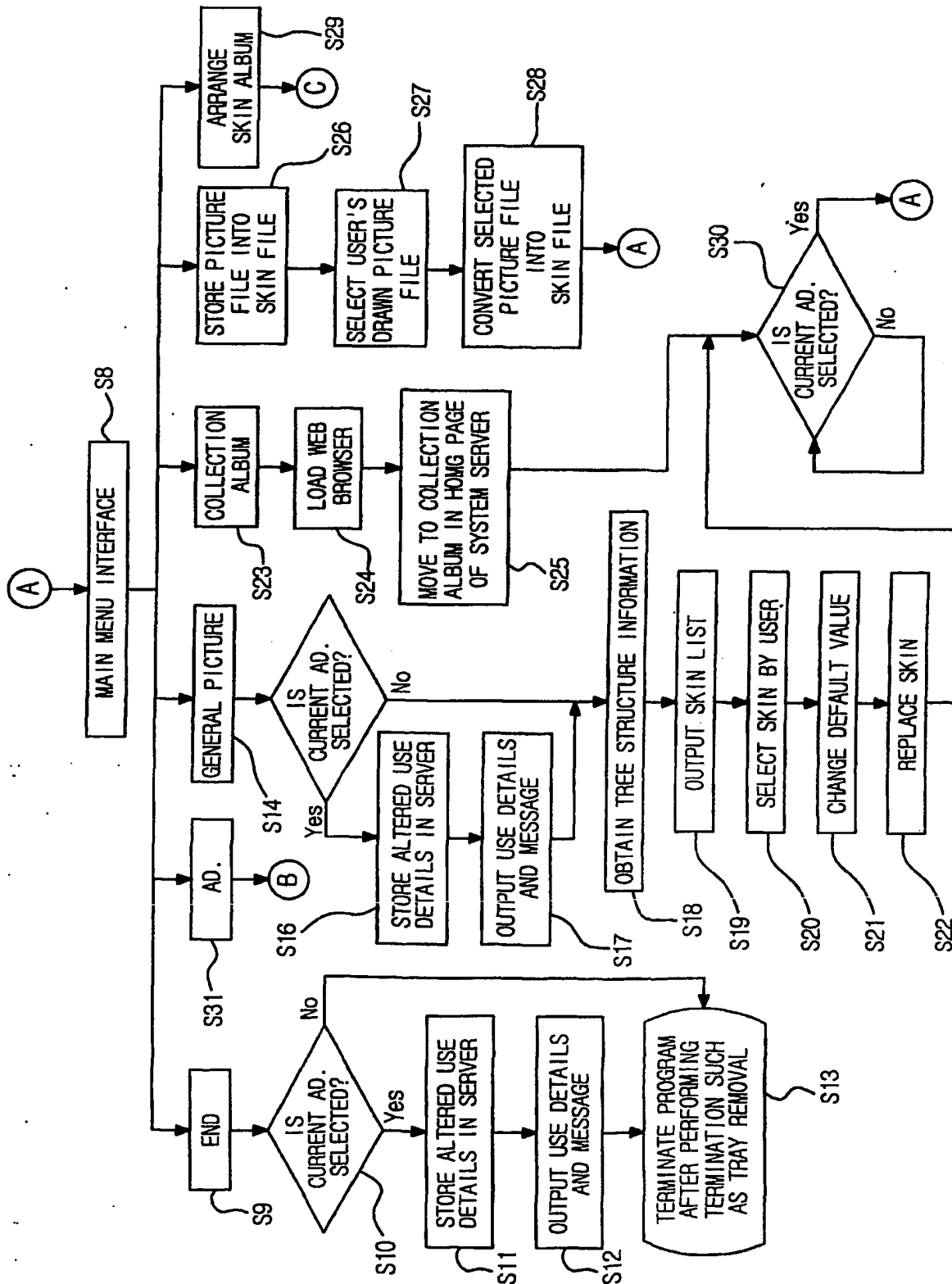


3/13

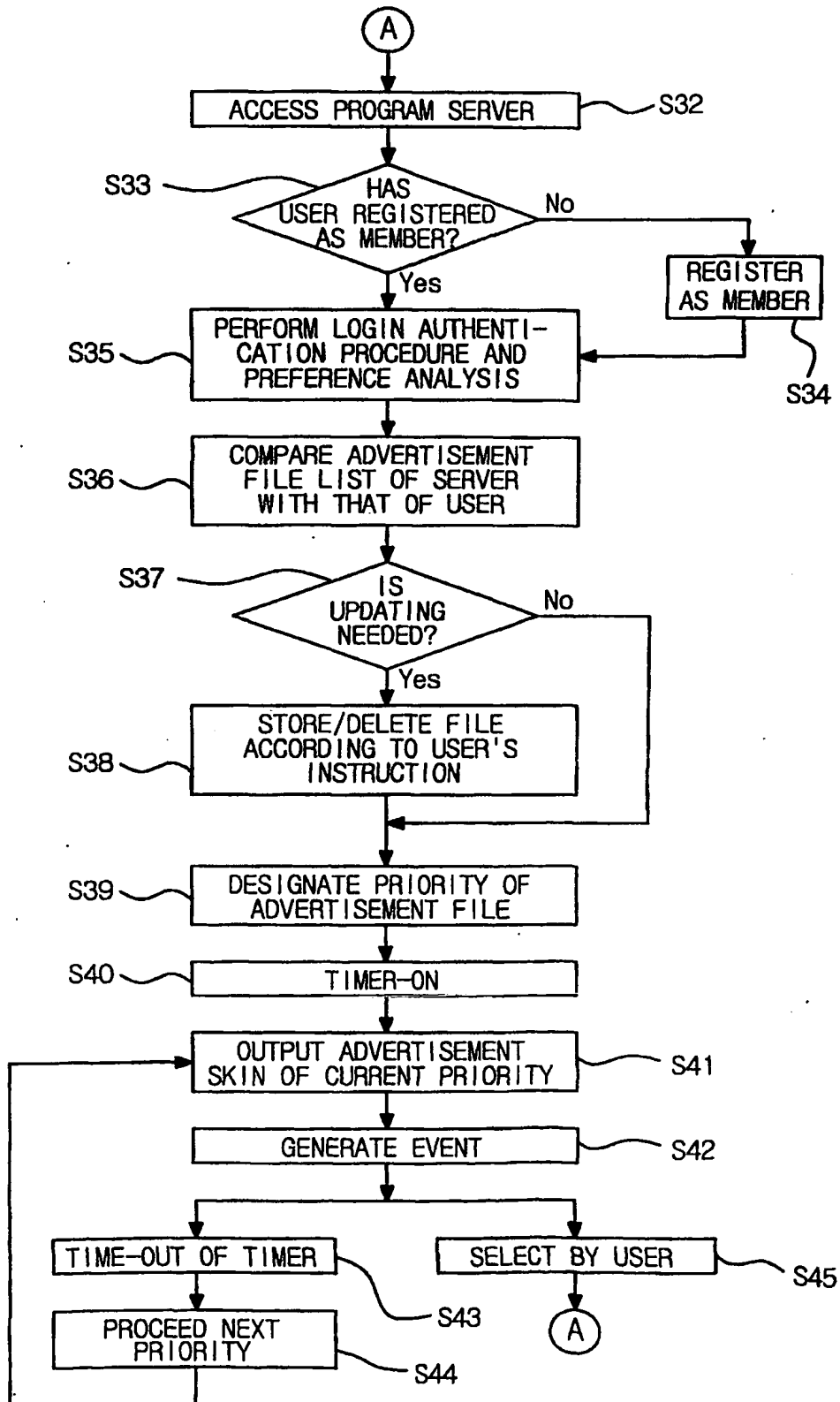
FIG. 3a

4/13

FIG. 3b

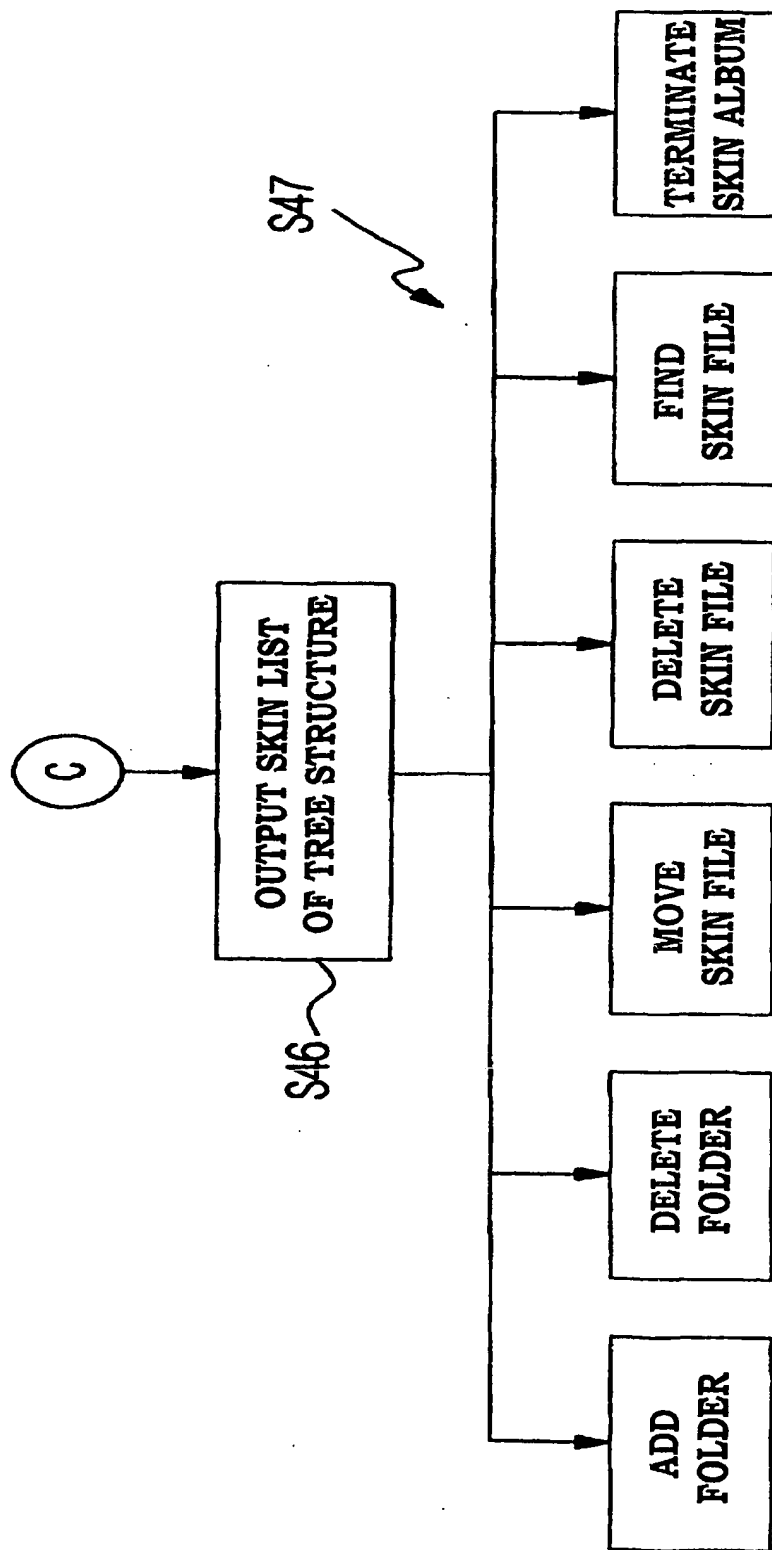


5/13

FIG. 3c

6/13

FIG. 3d



7/13

FIG. 4

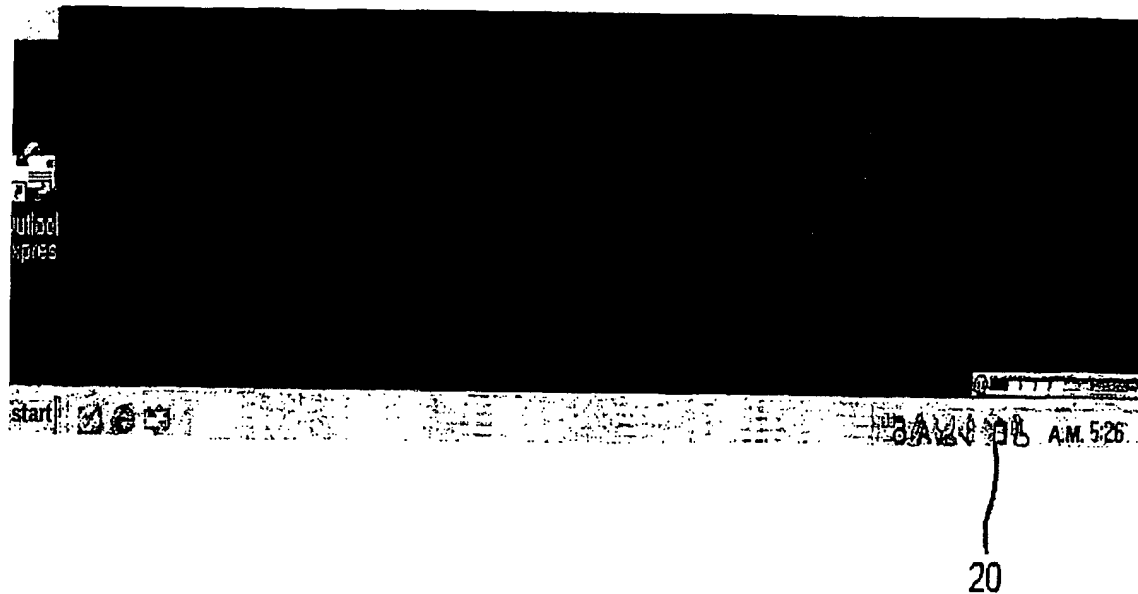
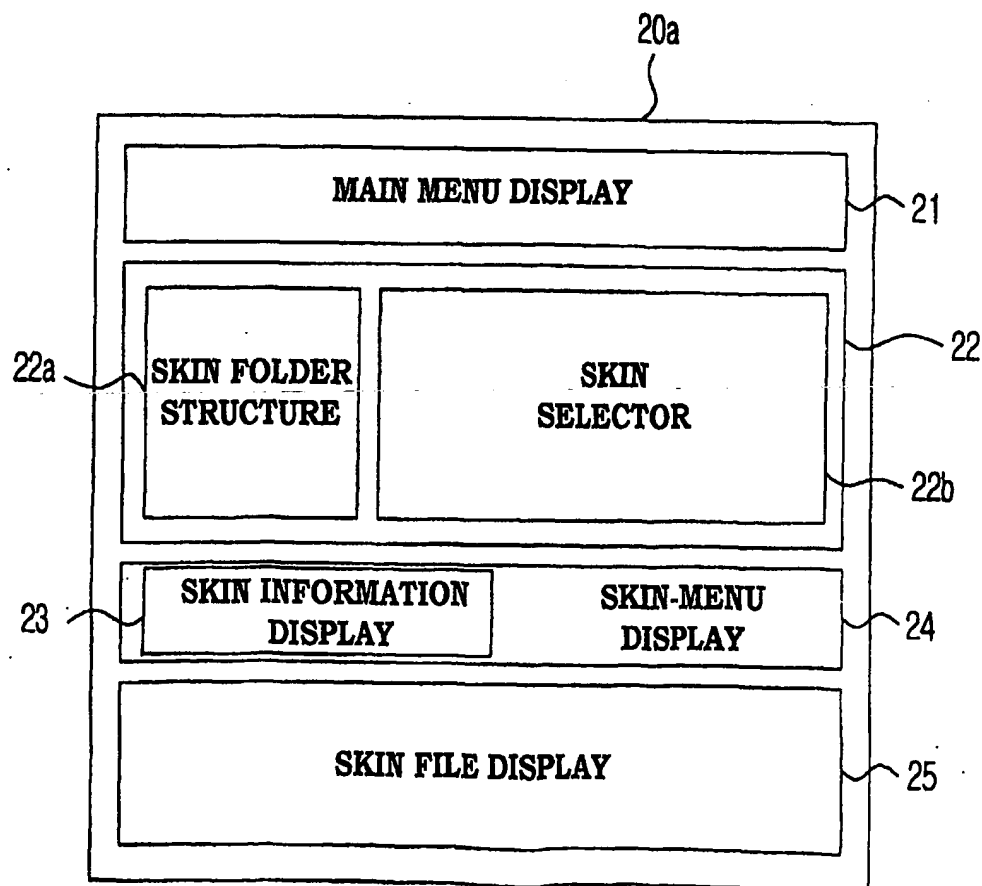
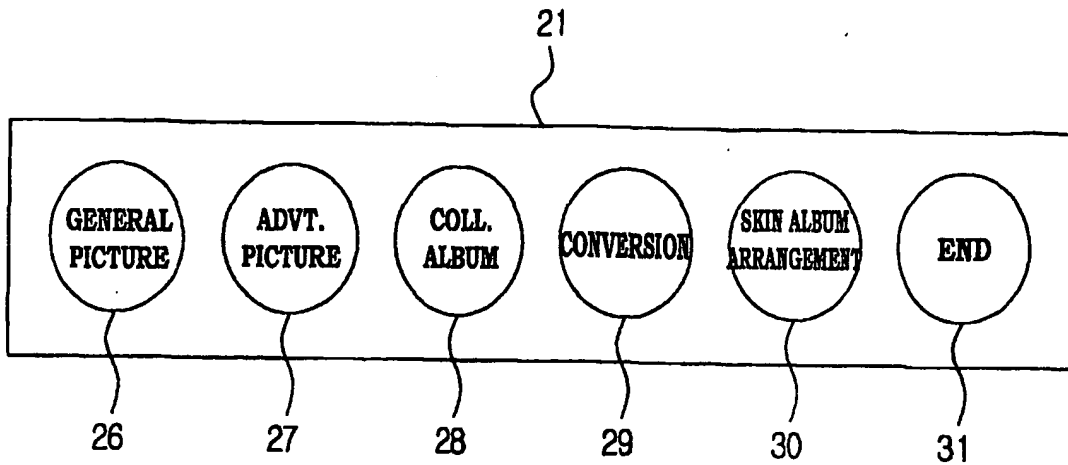
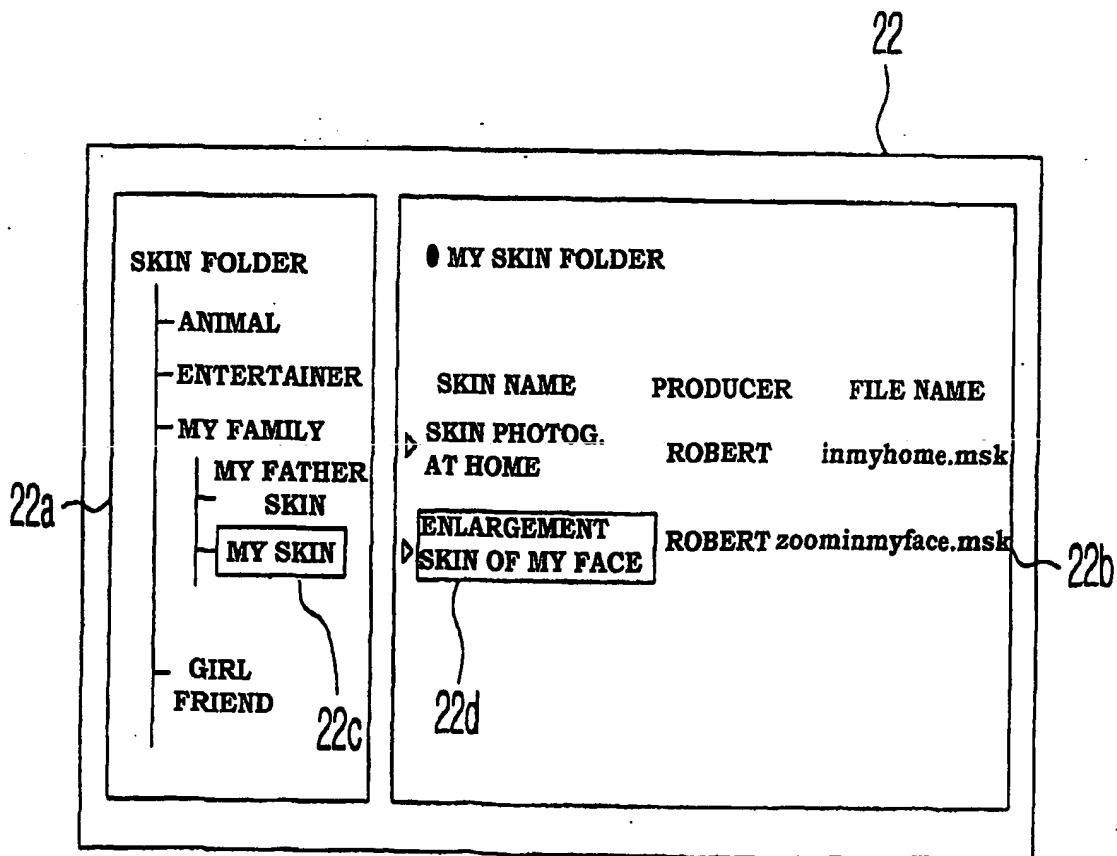


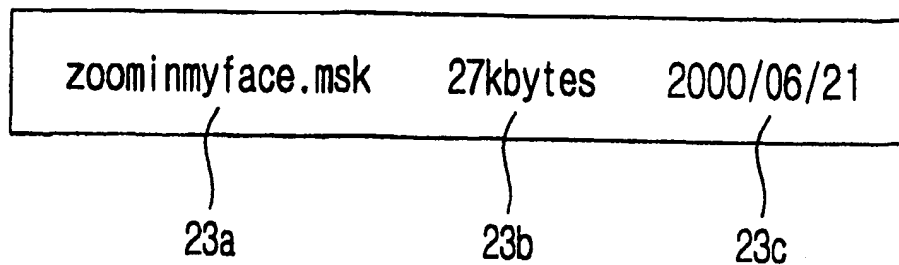
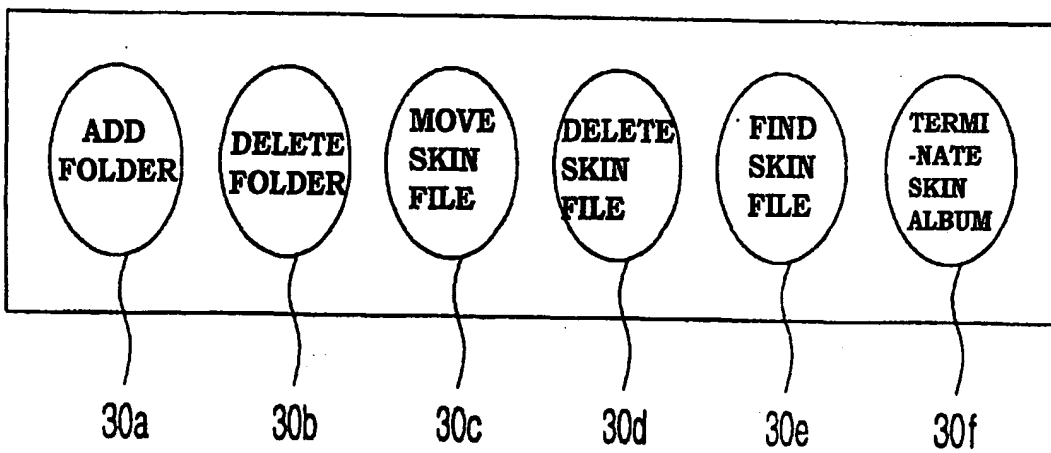
FIG. 5



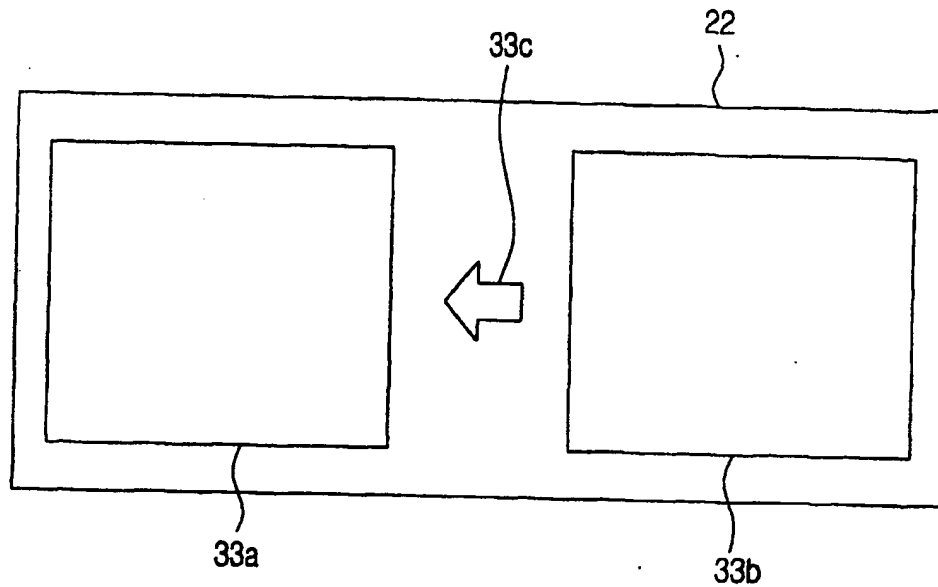
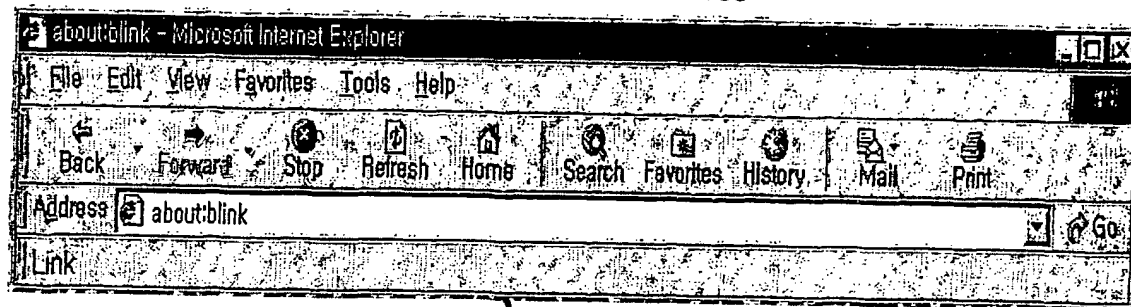
8/13

FIG. 6**FIG. 7**

9/13

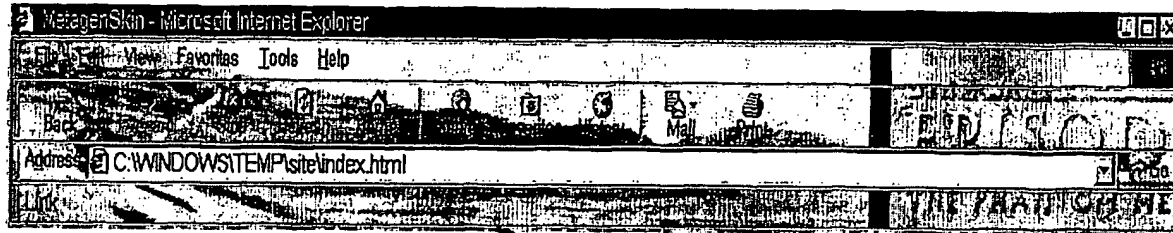
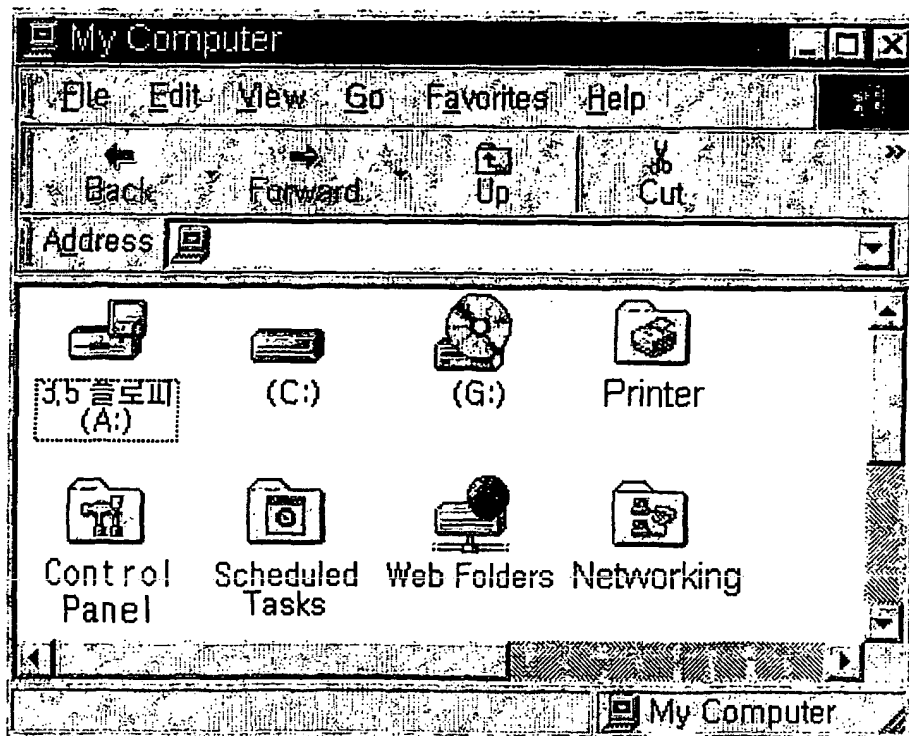
FIG. 8**FIG. 9**

10/13

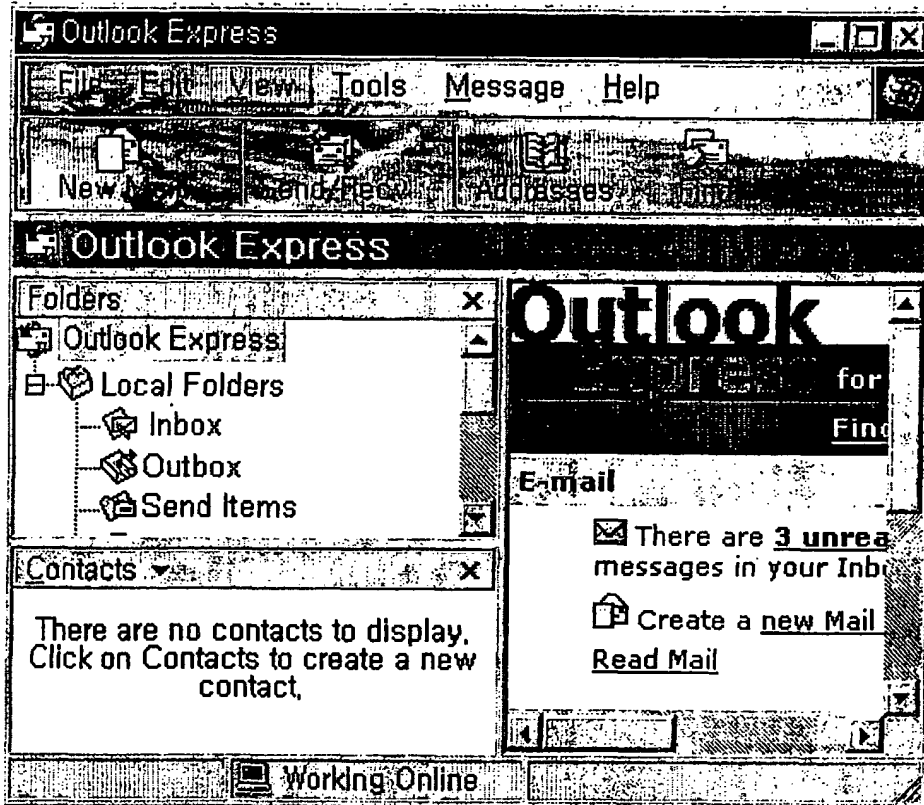
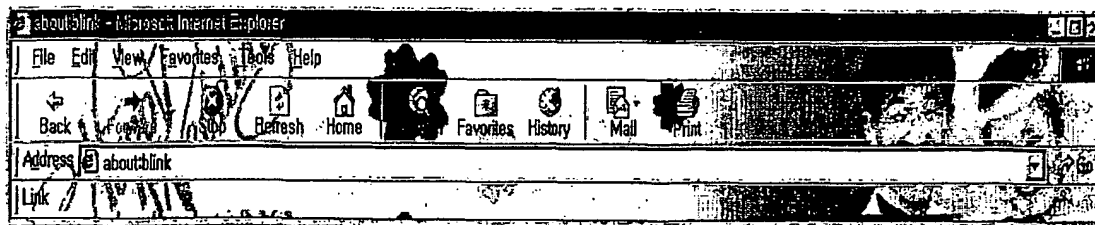
FIG. 10**FIG. 11a**

35

11/13

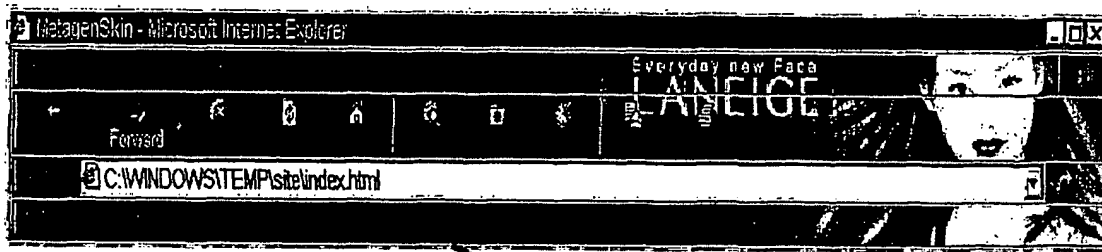
FIG. 11b**FIG. 11c**

12/13

FIG. 11d**FIG. 12a**

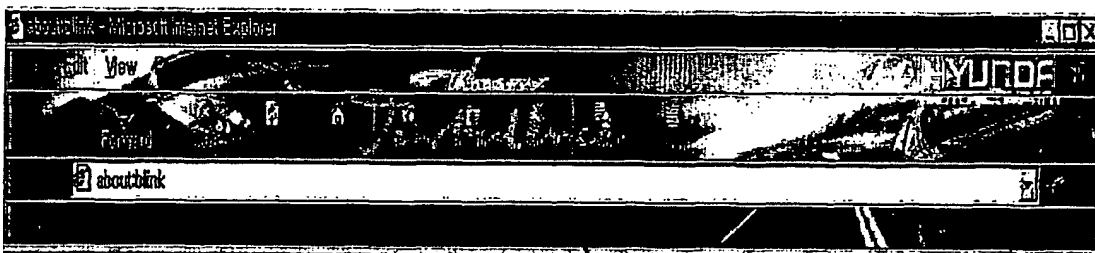
13/13

FIG. 12b



40

FIG. 13



50

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR01/01009

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 G06F 17/60 ; G06F 19/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean patents and applications for inventions since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KR 2000-6753 A (KANG SHIN-HYEOK) 7 FEB. 2000 SEE THE WHOLE DOCUMENT	1-14
Y	KR 2000-12573 A (DECA COMMUNICATIONS INC.) 6 MAR. 2000 SEE THE WHOLE DOCUMENT	1-14
A	WO 9847090 A (SONY ELEC.) 14 APR. 1998 SEE THE WHOLE DOCUMENT	1-14

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

21 AUGUST 2001 (21.08.2001)

Date of mailing of the international search report

23 AUGUST 2001 (23.08.2001)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, Dunsan-dong, Seo-gu, Daejeon
Metropolitan City 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

JEONG, Jae Hoon

Telephone No. 82-42-481-5787

